RECLAMATION

Managing Water in the West

DRAFT Environmental Assessment for the Newlands Project Water Rights Retirement Program

Lahontan Basin Area Office
Carson City, Nevada
Mid-Pacific Region

U.S. Department of the Interior
Bureau of Reclamation

June 2010

Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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Section 1
Introduction

This document is a DRAFT Environmental Assessment (EA) for the Newlands Project Water Rights Retirement Program (Retirement Program) and has been prepared in accordance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508, and Department of Interior regulations for the Implementation of the National Environmental Policy Act of 1969 (43 CFR Part 46).

In part, the proposed action requiring environmental analysis in the EA for the Retirement Program is for the Bureau of Reclamation (Reclamation) to provide $3 million to the Newlands Project Water Rights Fund (Fund). The United States has appropriated this funding through Public Law 110-161, Sec. 208. (a)(4), as amended by Public Law 111-8 to support a joint Federal, State and Pyramid Lake Paiute Tribe (Tribe) program for the acquisition, abandonment and retirement of water rights. The Retirement Program's goals are to permanently retire some surface water rights in the Newlands Project to benefit Pyramid Lake and to provide an alternative to time-consuming and costly legal or administrative proceedings concerning challenged water rights.

Additional federal funds in an amount up to $10 million may be made available from Public Law 107-171, the Farm Security and Rural Investment Act of 2002 (2002 Farm Bill), Section 2507, Desert Terminal Lakes as amended by Public Law 110-246 – Food, Conservation, and Energy Act of 2008 (2008 Farm Bill) to continue the acquisition and retirement of surface water rights in the Newlands Project, and is considered part of the proposed action for this EA.

1.1 Purpose of and Need for Action

1.1.1 Purpose of and Need for Proposed Action

The purpose of the Proposed Action is to meet the legislative intent of providing water to at-risk natural desert terminal lakes such as Pyramid Lake. Reclamation has been directed by Congress to provide the Newlands Project Water Rights Fund with $3 million. Federal contributions to the Fund would provide necessary financial support to the Retirement Program to acquire and retire water rights in the Newlands Project area.

The Retirement Program also provides a mechanism to resolve certain administrative and judicial proceedings involving challenges to Newlands Project water rights that are time consuming and costly for all parties involved. The acquisition and retirement of surface water rights would benefit both the Tribe and water rights owners because it offers an alternative to reaching resolution on challenged water rights outside of the legal process.

If Reclamation provides additional funding to the Retirement Program, in an amount up to $10 million from Public Law 107-171, the Farm Security and Rural Investment Act of 2002 (2002 Farm Bill), Section 2507, Desert Terminal Lakes as amended by Public Law 110-246 – Food, Conservation, and Energy Act of 2008 (2008 Farm Bill), the purpose of the federal funds would be to continue previous efforts started by the Assembly Bill 380 Program (A.B. 380 Program) to acquire and retire up to, but not to exceed, 6,500 acres of surface water rights in the Newlands Project in order to benefit Pyramid Lake.

1.1.2 Location of Analysis Area

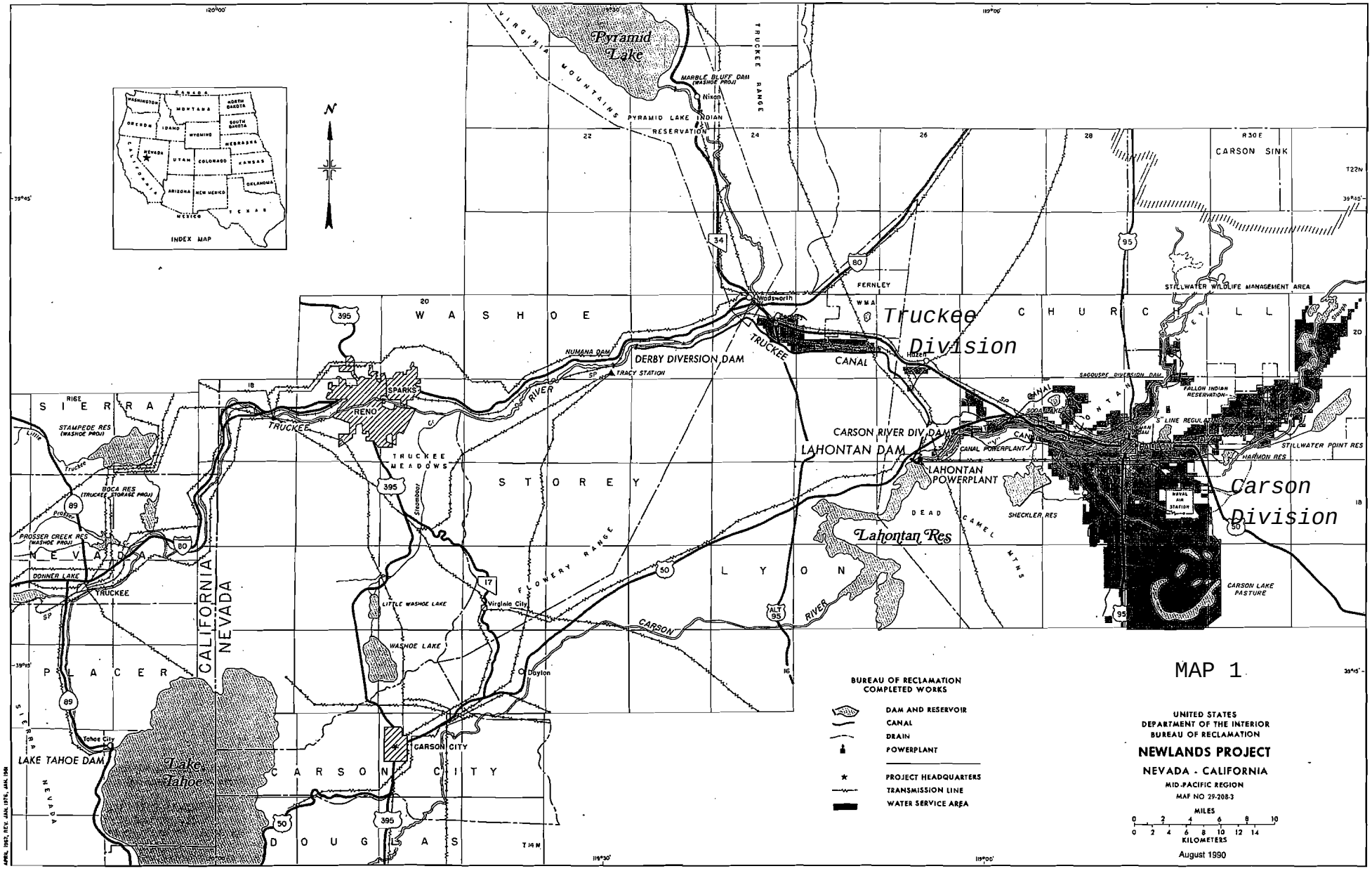
The location of the area analyzed in the EA for the Retirement Program is fully described in the *2000 Environmental Assessment for the Assembly Bill 380 Water Rights Acquisition Program* (2000 EA for the A.B. 380 Program), which is hereby incorporated by reference (Reclamation 2000). See Map 1 for location of the Newlands Project. It includes the lower Truckee River corridor below Derby Dam, Pyramid Lake, the Bureau of Reclamation's Newlands Project, and the Carson River terminus areas downstream of the Newlands Project. Under the Retirement Program, surface water rights would be acquired and retired within the Newlands Project in Lyon and Churchill Counties, Nevada.

Reclamation's Newlands Project is made up of two divisions, the Truckee Division and the Carson Division. The Truckee Division includes the Truckee Canal and irrigation delivery system for service to approximately 4,000 acres of irrigated lands, mostly in Lyon County. Benchlands in this area receive 4.5 acre feet of water per acre for irrigation purposes. Irrigation water in the Truckee Division is supplied entirely by diversions from the Truckee River.

The Carson Division includes Lahontan Dam and Reservoir, the Carson River Diversion Dam and irrigation delivery system for approximately 55,000 acres of farmland, mostly in Churchill County. Bottomlands in this area receive 3.5 acre feet of water per acre for irrigation purposes. Irrigation water in the Carson Division is supplied by a combination of Carson River and Truckee River water sources that are stored in Lahontan Reservoir for use downstream.

1.1.3 Background

The Newlands Project has had a long history in the Truckee-Carson River basins of contentious administrative and judicial disputes regarding the forfeiture, abandonment or failure to perfect surface water rights.


Pyramid Lake
MARBLE BLUFF DAM (WASHOE PROJ)
Nixon
PYRAMID LAKE INDIAN RESERVATION
TRUCKEE RANGE
VIRGINIA MOUNTAINS
CARSON SINK
STILLWATER WILDLIFE MANAGEMENT AREA
Wadsworth
FERNLEY
Truckee Division
CANAL
Hazen
SAGOUSPE DIVERSION DAM
FALLON INDIAN RESERVATION
S" LINE REGULATING
FALLON
STILLWATER POINT RES
HARMON RES
NUMANA DAM
DERBY DIVERSION DAM
TRACY STATION
SPARKS
RENO
TRUCKEE MEADOWS
TRUCKEE RIVER
CARSON RIVER DIV. DAM
LAHONTAN DAM
LAHONTAN POWERPLANT
CANAL POWERPLANT
Lahontan Res
DEAD CAMEL MTNS
SHECKLER RES
NAVAL AIR STATION
Carson Division
CARSON LAKE PASTURE
STAMPEDE RES (WASHOE PROJ)
BOCA RES (TRUCKEE STORAGE PROJ)
PROSSER CREEK RES (WASHOE PROJ)
DONNER LAKE
TRUCKEE
LITTLE WASHOE LAKE
WASHOE LAKE
FLOWERY RANGE
Virginia City
Dayton
CARSON RIVER
CARSON CITY
LAKE TAHOE DAM
Tahoe City
Lake Tahoe
CALIFORNIA
NEVADA
SIERRA NEVADA
WASHOE
STOREY
LYON
PLACER
CARSON CITY
DOUGLAS
CHURCHILL
INDEX MAP
BUREAU OF RECLAMATION COMPLETED WORKS
DAM AND RESERVOIR
CANAL
DRAIN
POWERPLANT
PROJECT HEADQUARTERS
TRANSMISSION LINE
WATER SERVICE AREA
MAP 1
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
NEWLANDS PROJECT
NEVADA - CALIFORNIA
MID-PACIFIC REGION
MAP NO 29-208-3
MILES
KILOMETERS
August 1990

Early 20th Century development for municipal, industrial and agricultural uses (particularly for the Newlands Project) changed river discharge patterns and increased water diversions in the Truckee River watershed. By the mid-1930s, Pyramid Lake was nearly 80 feet lower than in 1900. This contributed to dramatic declines in fish populations of great cultural importance to the Tribe, for the endangered cui-ui found only in Pyramid Lake and the Truckee River and for the threatened Lahontan cutthroat trout.

The Tribe sought abandonment and forfeiture of water rights, and challenged water rights transfers with the goal of reducing diversions from the Truckee River into the Newlands Project. The Tribe filed petitions with the Orr Ditch and Alpine Decree through the U.S. District Court of Nevada alleging certain rights were not perfected or were forfeited and abandoned. Simultaneously, the Tribe protested water-right transfer applications with the State of Nevada (some of these acres overlap with petitioned acres) where the water right owner had filed an application with the State Engineer to change the place of use of the water rights and the Tribe protested the change. A total of 9,429 water-righted acres in the Newlands Project were disputed by the Tribe through either judicial or administrative proceedings.

By 1999, representatives of various parties and the Nevada legislature were working to create a water rights retirement program to move toward the Tribe's goal of reducing Truckee River diversions and the water users' goals of obtaining compensation for their challenged water rights or removing the legal challenge to those rights.

Nevada Assembly Bill (A.B.) 380 Program (1999 - 2006):
Nevada Assembly Bill 380, passed in the 1999 session of the Nevada State Legislature, was negotiated by a group of Tribal, local and government interests affected by the long-standing water rights conflicts and was designed to help settle some of these disputes.

A.B. 380 created a water rights acquisition program, intended to resolve the administrative and judicial disputes involving 9,429 water righted acres in the Newlands Project by acquiring and permanently retiring water rights appurtenant to 6,500 acres. Once a quantity of water rights equal to 6,500 acres was retired, the Tribe had agreed to withdraw or dismiss its water rights transfer protests and petitions on remaining acreage associated with the original 9,429 water-righted acres in dispute.

A Joint Testimony on A.B. 380, including commitments and agreements of the signatories to the testimony was incorporated by reference into the law. The signatories to the Joint Testimony included the Tribe, Truckee Carson Irrigation District (TCID), Sierra Pacific Power Company, Churchill County, and the City of Fallon.

The A.B. 380 legislation created the Newlands Project Water Rights Fund to be administered by the Carson Water Subconservancy District (CWSD). A total of $14,020,655 was spent to acquire and retire 4,623.54 acres of water rights through 1,328 transactions before the Fund was exhausted. Many of these water rights were not used because there was no longer any actual means of conveyance due to the conversion of agricultural land to urban uses (CWSD 2008).

Contributors to the Fund included the Bureau of Reclamation ($6.087 million), State of Nevada ($3.3 million), Truckee Meadows Water Authority and Sierra Pacific Power Company ($3.44 million), Carson-Truckee Water Conservation District ($100,000), interest earned on funds held on behalf of the program and other miscellaneous funds (CWSD 2008).

The A.B. 380 provision creating the Newlands Project Water Rights Fund expired on June 30, 2006.

Post- Assembly Bill 380 (2007-2009):
When the A.B. 380 water right acquisition program fell short of the goal of retiring 6,500 acres of water rights, the Tribe moved to reactivate petition cases filed at the U.S. District Court (Court) seeking the forfeiture of challenged water rights.

The Court issued orders in 2008 and 2009 concerning legal issues that were brought before the court following the conclusion of the A.B. 380 Program. The Court ruled on the status of the A.B. 380 Joint Testimony, the status of prior petitions filed by the Tribe, and on rules for filing new petitions. The Court stated that the 6,500 acres of water rights could be retired and abandoned through the combination of the water rights acquisition program and final determinations in the Tribe's petitions and protests outside of the acquisition program.

However, there is no consensus among the parties involved as to the legal effect of these Court orders. The Tribe may choose to request an appeal to the 9th Circuit court in the future on certain legal points of contention. The Tribe asserts that the A.B. 380 Program was unsuccessful in reaching the goal of retiring 6,500 acres of water rights, and they are under no obligation to continue with the terms outlined in the Joint Testimony. If the original A.B. 380 goal of retiring 6,500 acres of water rights is ever reached, the Tribe might consider dropping the petitions on challenged water rights and withdrawing protests on water rights transfers, but the Tribe contends that they are not obligated to take these actions.

In 2002, Congress passed Public Law 107-171, the Farm Security and Rural Investment Act of 2002 (2002 Farm Bill), Section 2507, Desert Terminal Lakes as amended by Public Law 110-246 – Food, Conservation, and Energy Act of 2008 (2008 Farm Bill) which transfers funds to the Bureau of Reclamation to be used, in part, to provide water to at-risk natural desert terminal lakes. Reclamation may provide up to $10 million from these funds to continue the acquisition and

retirement of surface water rights in the Newlands Project under the Retirement Program to benefit Pyramid Lake.

In 2007, Congress passed the Consolidated Appropriations Act, Public Law 110-161, Sec. 208. (a)(4), (as amended by P.L. 111-8 in 2009). This legislation provides that the Secretary of the Interior, *"shall allocate $3,000,000 to the Newlands Project Water Rights Fund for a Federal-State-Pyramid Lake Paiute Tribe program, to be administered by an entity identified by the 3 applicable parties for the retirement of water rights."* In addition to the Pyramid Lake Paiute Tribe, Reclamation is the Federal representative and the State of Nevada, Department of Conservation and Natural Resources is the State entity referenced in the legislation. Great Basin Land and Water, a Nevada non-profit organization, has been identified as the Administrator for the Retirement Program and for the Fund by the three parties named in the legislation. The "new" Newlands Project Water Rights Fund, while bearing the same name as the fund created by Nevada A.B. 380 legislation, is a different fund and is not tied to any Nevada legislation.

1.2 Purpose and Need for Environmental Assessment

1.2.1 Background on the 2000 Environmental Assessment

A *Finding of No Significant Impact* determination was signed on September 12, 2000 by Reclamation for actions analyzed in the 2000 *Environmental Assessment for the Assembly Bill 380 Water Rights Acquisition Program* (2000 EA for the A.B. 380 Program). The decision was to implement Alternative 2 – Proposed Action, which resulted in Reclamation funding a portion of the A.B. 380 Program. The Proposed Action included Reclamation providing up to $10 million of federal funds over a period of years for acquiring and retiring up to 6,500 acres of surface water rights in Reclamation's Newlands Project.

The 2000 EA for the A.B. 380 Program indicated that the Proposed Action would benefit the trust assets of the Pyramid Lake Paiute Tribe by less irrigation water being diverted from the Truckee River to the Newlands Project, higher inflows into Pyramid Lake and higher Pyramid Lake water elevations than the No Action alternative. The analysis indicated that the amount of active irrigated acreage in the Newlands Project would increase with or without the implementation of the A.B. 380 Program. However, fully implementing the Proposed Action would result in less active irrigated acres than the No Action alternative which describes litigation and protests being resolved at some future date.

The A.B. 380 Program succeeded in acquiring and retiring 4,623.54 acres of water rights in the Newlands Project before the Fund was exhausted. The Nevada legislative effort through A.B. 380 expired in July of 2006, but interest in acquiring and retiring additional water rights in the Newlands Project continues.

1.2.2 2010 Environmental Assessment for the Retirement Program

The Proposed Action to fund the Newlands Project Water Rights Retirement Program fits within the context of the environmental analysis prepared by Reclamation in 2000 for the A.B. 380 Program. The 2000 analysis addressed the effects of retiring up to 6,500 acres of water rights acquisitions, as compared to taking no action. Implementation of the 2010 Proposed Action to fund the Retirement Program would result in an incremental gain toward that objective. Although the legal significance of reaching the 6,500 acre goal for surface water rights acquisition and retirement is uncertain, the 2000 EA for the A.B. 380 Program still provides a reasonable range of alternatives for the current environmental analysis.

Since a period of time has elapsed following the A.B. 380 Program effort, this EA for the Retirement Program considers whether new circumstances, new information, or changes in the action or its impacts not previously analyzed warrant new analysis. Section 2 provides an update on the current Proposed Action to fund the Retirement Program. Please refer to the 2000 EA for the A.B. 380 Program for a detailed description of the authorized project's affected environment and environmental consequences.

1.2.3 Authority

The Newlands Project Water Rights Retirement Program is authorized by:

The 1946 Public Law 79-732, Fish and Wildlife Coordination Act, Section 1 which states in part:

> *"For the purpose of recognizing the vital contribution of our wildlife resources to the Nation, the increasing public interest and significance thereof due to expansion of our national economy and other factors, and to provide that wildlife conservation shall receive equal consideration and be coordinated with other features of water-resource development programs through the effectual and harmonious planning, development, maintenance, and coordination of wildlife conservation and rehabilitation for the purposes of this Act in the United States, its Territories and possessions, the Secretary of the Interior is authorized (1) to provide assistance to, and cooperate with, Federal, State, and public or private agencies and organizations in the development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat, . . ."*

By Public Law 107-171, the Farm Security and Rural Investment Act of 2002 (2002 Farm Bill), Section 2507, Desert Terminal Lakes as amended by Public Law 110-246 – Food, Conservation, and Energy Act of 2008 (2008 Farm Bill):

> *"(a) Transfer - Subject to subsection (b) and paragraph (1) of section 207(a) of Public Law 108-7 (117 Stat. 146), notwithstanding paragraph*

> *(3) of that section, on the date of enactment of the Food, Conservation, and Energy Act of 2008, the Secretary of Agriculture shall transfer $175,000,000 of the funds of the Commodity Credit Corporation to the Bureau of Reclamation Water and Related Resources Account, which funds shall*
>
> *(1) be used by the Secretary of the Interior, acting through the Commissioner of Reclamation, to provide water to at-risk natural desert terminal lakes;"*

and by Public Law 110-161, Sec. 208. (a)(4), as amended by Public Law 111-8:

> *"Notwithstanding any other provision of law, of amounts made available under section 2507 of the Farm Security and Rural Investment Act of 2002 (43 U.S.C. 2211 note; Public Law 107-171), the Secretary of the Interior—*
>
> (4) *shall allocate $3,000,000 to the Newlands Project Water Rights Fund for a Federal-State-Pyramid Lake Paiute Tribe program, to be administered by an entity identified by the 3 applicable parties for the retirement of water rights."*

Section 2
Alternatives Considered

The 2000 *Environmental Assessment for the Assembly Bill 380 Water Rights Acquisition Program* analyzed the No Action alternative and the Proposed Action alternative to acquire and retire up to 6,500 acres of water rights in the Newlands Project. This Section updates information on the alternatives to include providing funding to the Newlands Project Water Rights Retirement Program to continue acquiring and retiring surface water rights in the project area.

2.1 No Action

The No Action Alternative is not a continuation of existing conditions in perpetuity; rather it is a reasonable prediction of foreseeable future conditions expected to occur without the proposed action.

Under the No Action Alternative, Reclamation would not provide $3 million to the Newlands Project Water Rights Fund as directed by Public Law 110-161, Sec. 208 (a)(4). No additional federal funds would be made available from Public Law 107-171, the Farm Security and Rural Investment Act of 2002 (2002 Farm Bill),

Section 2507, Desert Terminal Lakes as amended by Public Law 110-246 – Food, Conservation, and Energy Act of 2008 (2008 Farm Bill) to continue the acquisition and retirement of surface water rights in the Newlands Project, Both the Retirement Program and the Fund would be unfunded and additional surface water rights with a value of $3 million to $13 million would not be acquired and retired in the Newlands Project through this effort.

The Tribe might decide to pursue petition cases and water rights transfer protests on challenged water rights within the Newlands Project.

In the 2000 EA for the A.B. 380 Program, Reclamation assumed that the probable rate of success (win:loss record) that the Tribe, together with the United States, would have in litigation of the challenged water rights cases (the water transfer and petition cases) was 60:40. Reclamation has no new information to indicate this assumption should be changed for the purpose of this analysis.

As described in the 2000 EA for the A.B. 380 Program, it is assumed that up to 75,000 acre feet of water rights planned for acquisition under the Fish and Wildlife Service (FWS) Water Rights Acquisition Program for Lahontan Valley Wetlands would be completed over a 25 to 30 year period. As of 2009, about 39,700 acre feet of water has been acquired from the Carson Division for the Lahontan Valley wetlands. (Grimes, pers. comm. 2009)

2.2 Proposed Action

Under the Proposed Action, Reclamation would provide from $3 million to $13 million to the Newlands Project Water Rights Fund for the Newlands Project Water Rights Retirement Program.

Great Basin Land and Water (GBLW), the Nevada non-profit selected to administer the Retirement Program and the Fund would manage the Retirement Program to acquire and retire $3 million worth of surface water rights in the Newlands Project. An estimated several hundred acres of surface water rights over a 2 year period may be retired under this program. The expected size of the average transaction would be approximately 2 acres. Transactions are likely to occur in a random pattern, with 94 percent of purchases from the Carson Division and 6 percent from the Truckee Division of the Newlands Project, based on the results of the A.B. 380 Program. TCID would receive a $1,233 payment for each acre of surface water rights that are retired, as an offset for lost operating and maintenance revenues associated with the retirement of water rights.

Water would be purchased only from willing sellers. GBLW would establish criteria for determining fair market value of the water rights to be acquired. Water rights under challenge in the change application proceedings and petition cases may receive priority, but unchallenged water rights may also be purchased. Demand from individual water rights owners would be a high priority, but other

water rights owners may participate. Water rights to be acquired may be either active or inactive.

Additional federal funds up to $10 million may be made available from Public Law 107-171, the Farm Security and Rural Investment Act of 2002 (2002 Farm Bill), Section 2507, Desert Terminal Lakes as amended by Public Law 110-246 – Food, Conservation, and Energy Act of 2008 (2008 Farm Bill) to continue the acquisition and retirement of surface water rights in the Newlands Project. The administrative details of this extension of the Retirement Program would be determined at a later date.

If implemented, the Retirement Program would result in an incremental increase toward retiring up to 6,500 acres of water rights in the Newlands Project.

The Tribe might decide to pursue petition cases and water rights transfer protests on challenged water rights within the Newlands Project.

The timeline for the authority to acquire water rights under the Retirement Program will terminate when 6,500 acres of surface water rights in the Newlands Project are retired and abandoned, whether by acquisition by the Fund or by any other process, including the final outcome of the Tribe's water rights transfer protests or petition cases.

As in the No Action alternative, the Proposed Action alternative assumes that up to 75,000 acre feet of water rights planned for acquisition under the Fish and Wildlife Service (FWS) Water Rights Acquisition Program for Lahontan Valley Wetlands would be completed over a 25 to 30 year period. As of 2009, about 39,700 acre feet of water has been acquired from the Carson Division for the Lahontan Valley wetlands. (Grimes, pers. comm. 2009)

Section 3

Affected Environment and Environmental Consequences

This Section presents the environmental consequences of the Proposed Action alternative. The objective of this Section is to determine whether new circumstances, new information, or changes in the action or its impacts not previously analyzed warrant new analysis. Please refer to the 2000 EA for the A.B. 380 Program for a detailed description of the authorized project's affected environment and environmental consequences.

3.1 Background

2000 EA for the A.B. 380 Program

The 2000 EA for the A.B. 380 Program evaluated the effects of the No Action and Proposed Action alternatives on water levels in Lahontan Reservoir and Pyramid Lake, the quantity of diversions into the Truckee Canal, the volume of flow in the Carson and Truckee rivers, the amount of water flowing to the Lahontan Valley wetlands and the amount of water-righted acres in the Newlands Project. Most of these effects were calculated using the Below Lahontan Reservoir Model.

The model provided approximate representations to assist in the analysis of the environmental consequences of the two alternatives (No Action and Proposed Action). A summary of the model results was included in the 2000 EA for the A.B. 380 Program and is reprinted below in Table 1.

Under the No Action alternative, the water rights protests and litigation would be concluded over time. Upon the implementation of the Proposed Action alternative, the balance of the acreage associated with the challenged water rights transfer applications would become potentially productive acreage. The model results indicated that the amount of active irrigated acreage in the Newlands Project would increase with or without the implementation of the water rights acquisition program to retire 6,500 acres of surface water rights. However, after the Proposed Action was fully implemented there would be 843 fewer active irrigated acres in the Newlands Project than there would be if litigation and protests were resolved at some future date as described by the No Action alternative.

The model results indicate that under the Proposed Action alternative, there would be less water diverted from the Truckee River to the Newlands Project and therefore, more flows from the Truckee River would reach Pyramid Lake. Consequently, less water would reach Lahontan Reservoir and the Lahontan Valley wetlands in comparison to the No Action alternative.

The 2000 EA for the A.B. 380 Program provides an analysis of the effects of these changes for each of the resource categories.

2010 EA for the Retirement Program

The key factors used to generate model results that were analyzed in the 2000 EA for the A.B. 380 Program were re-evaluated based on present day conditions. A relative comparison of these factors indicates that similar results would be expected if the model was used to generate a new analysis. Therefore, similar trends in the amount of active acreage in the Newlands Project, flows in the Truckee River, and water levels in Lahontan Reservoir, Lahontan Valley wetlands, and Pyramid Lake under the No Action or Proposed Action alternatives also apply to this EA for the Retirement Program.

***Table 1: Comparison of Results for Current Condition[4], No Action and A.B. 380**

	Current [1]	**No Action (60:40)**[2]	**A.B. 380**[3]	**A.B. 380 vs. No Action**
TRUCKEE RIVER BASIN				
Average Diversion at Derby Dam (acre-feet)	*94,100*	105,200	101,000	**-4,200**
Truckee River Inflow to Pyramid Lake (acre-feet)	*477,600*	466,700	470,800	**4,100**
Ending Pyramid Lake Elevation in 95 years (feet)	*3,839.6*	3,835.0	3837.1	**2.1**
Ending Adult Female Cui-ui	*605,700*	333,600	392,200	**58,600**
A.B. 380 Truckee Division Acquisitions (acres)	*0*	0	65	**65**
CARSON RIVER BASIN				
Total Newlands Project Active Water Rights (acres)	*59,963*	63,735	62,892	**-843**
Lahontan Reservoir Release and Spill (acre-feet)	*309,50*	313,500	304,400	**-9,100**
Total Lahontan Valley Wetlands Water Supply (acre-feet)	*62,700*	114,300	111,400	**-2,900**
Primary Wetland Habitat (acres)	*13,597*	24,368	23,556	**-812**
A.B. 380 Carson Division Acquisitions (acres)	*0*	0	6,435	**6,435**

[1] Current Condition does not include 9,429 water-righted acres that are currently under litigation.
[2] Assumes Tribe prevails in 60% of current water rights litigation in the Newlands Project and completed FWS Wetlands Water Rights Acquisition
[3] 65 acres of water rights acquired and retired in the Truckee Division and 6,435 acres in the Carson Division and completed FWS Wetlands Water Rights Acquisition
[4] Current Condition in Table1 reflects the situation when model results were generated.

*Table 1 was originally Table 2.1 on page 2-4 of the EA for the A.B. 380 Program.

3.2 Changes to the Proposed Action

Any changes between the Proposed Action alternatives described for the 2000 A.B. 380 Program and the 2010 Retirement Program are administrative in nature and would not result in any new or greater impacts beyond those previously analyzed.

3.3 Vegetative Communities

3.3.1 Affected Environment

The 2000 EA for the A.B. 380 Program describes the various plant communities in the analysis area. The implementation of the flow regime to benefit cottonwood tree regeneration on the lower Truckee River has continued, in order to encourage seedling establishment throughout the growing season. Eurasian watermilfoil (*Myriophyllum spicatum)* a State of Nevada listed noxious aquatic weed, has been reported to occur downstream in the Truckee River to Marble Bluff Dam (Mosley, 2009) and is now present in the Truckee Canal (Nibling, 2009).

3.3.2 Environmental Consequences

The potential effect to vegetation from implementation of the alternatives was described in the 2000 EA for the A.B. 380 Program. That analysis adequately addresses the effects of the No Action alternative and the Proposed Action to fund the Retirement Program, resulting in the permanent retirement of at least several hundred acres of surface water rights. There are no new circumstances, new information, or changes in the action or its impacts not previously analyzed that would warrant new analysis.

3.4 Wildlife and Endangered, Threatened, Candidate Species

3.4.1 Affected Environment

The following changes have occurred to the list of species that are protected by the Endangered Species Act of 1973 (ESA); these species were addressed in the 2000 EA for the A.B. 380 Program.

<u>American peregrine falcon</u>
The Errata Sheet for the 2000 EA for the A.B. 380 Program noted that the American peregrine falcon was no longer a listed species under the ESA.

<u>Bald Eagle</u>
The bald eagle was removed from listing under the ESA in 2007. The bald eagle continues to be protected by the Bald and Golden Eagle Protection Act and by the Migratory Bird Treaty Act.

Mountain Plover

The mountain plover was proposed for listing as a threatened species under the ESA in 1999; the U. S. Fish and Wildlife Service withdrew the proposed rule in 2003. While the mountain plover is no longer a candidate species on the ESA list it is still protected by the Migratory Bird Treaty Act.

For this EA for the Retirement Program, federally listed species under the ESA include the cui-ui (endangered) and Lahontan cutthroat trout (threatened). Both fish species are known to use habitat in the Lower Truckee River and in Pyramid Lake.

3.4.2 Environmental Consequences

As described in the 2000 EA for the A.B. 380 Program, the Proposed Action would be more beneficial to fish and their habitat in the Lower Truckee River and in Pyramid Lake than conditions expected with the No Action alternative. Model results indicate that over a 95 year period, water surface elevation at Pyramid Lake would be approximately 2.1 feet higher with the Proposed Action than under the No Action alternative. The Proposed Action alternative would yield one more spawning year than would occur under the No Action alternative, resulting in an additional 58,600 adult female cui-ui over the modeling period. While the difference between the two alternatives is relatively small, wetland and riparian habitats will benefit slightly from the additional flow under the Proposed Action alternative.

The effects on Lahontan cutthroat trout and cui-ui for the alternatives in this EA for the Retirement Program are the same as described in the 2000 EA for the A.B. 380 Program. There are no new species on the ESA list within the project area and no critical habitat has been designated that could be affected by the Proposed Action. There is no new biological information available concerning listed species which could be affected by the Proposed Action. There are no changes in the Proposed Action or its impacts not previously analyzed that would warrant new analysis for species listed in the ESA.

The 2000 EA for the A.B. 380 Program provides an analysis of effects of the No Action alternative and the Proposed Action alternative on bald eagles and on various migratory bird species within the project area. There are no changes in the Proposed Action or impacts not previously analyzed that would warrant new analysis.

3.5 Newlands Project Operations and Infrastructure

3.5.1 Affected Environment

The 2000 EA for the A.B. 380 Program describes project facilities, Operating Criteria and Procedures, Truckee River operations, irrigated acres, wetland deliveries, project efficiency and Lahontan Reservoir operations. The Truckee

River Operating Agreement (TROA) was signed in September 2008 but has not yet been implemented. The Cumulative Effects section provides more discussion on TROA.

In January 2008, a major breach in the Truckee Canal resulted in residential flooding in the City of Fernley. Water flows diverted into the Truckee Canal have been restricted to 350 cubic feet per second by court order to provide for the safe operation of the canal while a risk assessment is completed and future canal options are evaluated.

3.5.2 Environmental Consequences

The potential effect to the Newlands Project Operations and Infrastructure from implementation of the alternatives was described in the 2000 EA for the A.B. 380 Program. That analysis adequately addresses the effects of the No Action alternative and the Proposed Action alternative to fund the Retirement Program, resulting in the permanent retirement of at least several hundred acres of surface water rights. There are no new circumstances, new information, or changes in the action or its impacts not previously analyzed that would warrant new analysis. An evaluation of the water flow and irrigation demand data for the Truckee Canal showed that the restricted flow regime is adequate to meet irrigation demand in most situations and does not affect the conclusions based on the model results.

3.6 Water Resources

3.6.1 Affected Environment

Water resources are described in the 2000 EA for the A.B. 380 Program.

3.6.2 Environmental Consequences

The 2000 EA for the A.B. 380 Program describes the long term effects of implementing either the No Action or Proposed Action alternatives. The long term is defined as the eventual resolution of litigation and protests on challenged water rights under the No Action alternative, or resolution following the retirement of 6,500 acres of water rights under the Proposed Action, in combination with final determinations in the Tribe's petitions and protests. The short term effects of implementing the Proposed Action for the Retirement Program is that at least several hundred acres of surface water rights in the Newlands Project would be permanently retired, and the water associated with these water rights would not be diverted from the Truckee River for irrigation purposes.

The 2000 EA for the A.B. 380 Program adequately addresses the effects of the alternatives on water resources; there are no new circumstances, new information, or changes in the action or its impacts not previously analyzed that would warrant new analysis.

3.7 Air Quality

3.7.1 Affected Environment

Lyon County and Churchill County continue to be in attainment for all monitored air quality pollutants. The Nevada Division of Environmental Protection, Bureau of Air Quality continues to monitor air quality at sites in Fallon and Fernley, although the sites have been converted to from monitoring particulate matter size of 10 microns or less (PM10) to monitoring for ozone and particulate matter size of 2.5 microns or less (PM2.5).

3.7.2 Environmental Consequences

Implementation of the two alternatives considered in this EA for the Retirement Program is not expected to result in any changes to the analysis contained in the 2000 EA for the A.B. 380 Program. Neither alternative is expected to result in violations of existing air quality standards or affect attainment status of the region.

3.8 Socio-Economics

3.8.1 Affected Environment

Annual growth rates for Churchill and Lyon counties, including the Fallon and Fernley areas, increased between 2000 and 2009, climbing a total of 10.8 percent for Churchill County and 35.9 percent for Lyon County (Nevada State Demographer's Office 2009). The changing demographics and influx of new residents accelerated the conversion of agricultural lands into housing and commercial developments, specifically in the Fernley and Fallon areas.

3.8.2 Environmental Consequences

Implementation of the two alternatives considered in this EA for the Retirement Program is not expected to result in any changes to the analysis contained in the 2000 EA for the A.B. 380 Program. Neither alternative is expected to affect the population growth rate for the analysis area, nor will the demand for community services in the area be impacted. Other effects of the alternatives are adequately addressed in the 2000 EA for the A.B. 380 Program.

3.9 Indian Trust Assets

3.9.1 Affected Environment

The following is an updated version of the Indian Trust Assets for the Pyramid Lake Paiute Tribe and the Fallon Paiute Shoshone Tribe:

Indian trust resources are legal interests in property or natural resources held in trust by the United States for Indian Tribes or individuals. The Secretary is the trustee for the United States on behalf of Indian Tribes; all Interior bureaus share

the Secretary's duty to act responsibly to protect and maintain Indian trust resources reserved by or granted to Indian Tribes or Indian individuals by treaties, statutes, and executive orders.

There are two federally-recognized tribes potentially impacted by the proposed action. The two tribes are the Pyramid Lake Paiute Tribe (Pyramid Lake Indian Reservation including Pyramid Lake), and the Fallon Paiute-Shoshone Tribes (Fallon Paiute-Shoshone Reservation and Fallon Colony). Trust resources of these tribes include land, water rights, trust income, and fish and wildlife; incomes are derived from these resources.

Fallon Paiute-Shoshone Tribes/ Fallon Indian Reservation and Colony

The Fallon Paiute-Shoshone Indian Reservation is located in Churchill County in west-central Nevada, approximately 10 mile northeast of Fallon and 65 miles east of Reno and Carson City. The Reservation includes members of the Paiute and Shoshone Tribes. The Fallon Indian Colony is located on 60 acres and Colony land is used for residential and commercial purposes.

Water rights on and appurtenant to the reservation are served by Newlands Project facilities and are part of the Carson Division. An estimated 5,513 of the 8,156 acres of the reservation are water righted. Approximately 1,800-3,175 acres have been irrigated.

The Fallon Tribes entered into a settlement agreement that was ratified by Congress as Title I of P.L. 101-618, or the Fallon Paiute-Shoshone Indian Tribes Water Rights Settlement Act of 1990. Section 103 of P.L. 101-618 limits annual water use on the reservation to 10,587.5 acre-feet (equivalent to 3,025 acres). It also, however, permits the Tribes to acquire up to 2,415.3 acres of land and up to 8,453.55 acre-feet of water rights. These water rights may be used for irrigation, fish and wildlife, municipal and industrial, recreation, or water quality purposes, or for any other beneficial use subject to applicable laws of the State of Nevada.

The Tribe has dedicated reservation acreage to be used for wetland habitat for wildlife. The Bureau of Indian Affairs entered into an agreement with the Fish and Wildlife Service in 1995 to acquire water rights for reservation wetlands; under that agreement, 1,613.4 acre-feet of water rights have been acquired.

P.L. 101-618 established the $43-million Fallon Paiute-Shoshone Tribal Settlement Fund; interest on the Settlement Fund may be spent according to the Fallon Tribes' investment and management plan for this fund.

Pyramid Tribe/Pyramid Lake Indian Reservation

The reservation of the Pyramid Lake Paiutes, located in Washoe County north of Reno and including Pyramid Lake, presently covers 475,085 acres. P.L. 101-618 affirmed that "all existing property rights or interests, all of the trust land within

the exterior boundaries of the Pyramid Lake Indian Reservation shall be permanently held by the United States for the sole use and benefit of the Pyramid Tribe (Section 210[b][1]).”

The Federal actions that set aside Pyramid Lake Indian Reservation explicitly reserved Pyramid Lake for the Tribe’s benefit. The Pyramid Tribe is allocated for irrigation an amount not to exceed 4.71 acre-feet per acre for 3,130 acres of bottomland farm (14,742 acre-feet) (Claim No. 1) and another 5.59 acre-feet per acre for 2,745 acres of benchlands (15,345 acre-feet) (Claim No. 2).

The Pyramid Lake fishery remains one of the cultural mainstays of the Pyramid Tribe. The Tribal fishery program operates hatcheries at Sutcliffe and Numana. Tribal hatcheries raise both the threatened LCT and endangered cui-ui. Along with conserving fish, the Pyramid Tribe manages and controls fishing and hunting rights on the reservation.

P.L. 101-618 established the $25-million Pyramid Lake Paiute Fisheries Fund and the $40-million Pyramid Lake Paiute Economic Development Fund. The Pyramid Tribe has complete discretion to invest and manage the Pyramid Lake Paiute Economic Development Fund; funds are available to the Tribe when the Truckee River Operating Agreement is implemented.

Summary

The key tribal trust assets identified for analysis are flows in the Truckee River, the elevation of Pyramid Lake and the effects on fish and wildlife that utilize these aquatic habitats. The 2000 analysis for the A.B. 380 Program evaluated if the water rights acquisition program supported by federal funds would have adverse impacts on tribal trust assets as compared to the No Action alternative projected conditions. The projected condition for both alternatives was calculated using a predicted win/loss ratio based on existing litigation in the Newlands Project. Model results indicated that there would be less inflow into Pyramid Lake under the No Action alternative than after implementation of the Proposed Action alternative.

3.9.2 Environmental Consequences

Implementation of the two alternatives considered in this EA for the Retirement Program is not expected to result in any changes to the analysis contained in the 2000 EA for the A.B. 380 Program. Neither alternative is expected to have any effect on the trust assets, amount of agricultural land, or amount of water delivered to the Fallon Paiute-Shoshone Tribe.

As described in the 2000 EA for the A.B. 380 Program, the Proposed Action alternative provides more benefits to the trust assets of the Pyramid Lake Paiute Tribe than the No Action alternative because less water would be diverted from the Truckee River, resulting in more flows into Pyramid Lake and higher lake

elevation over time. These factors would positively influence the fisheries of Pyramid Lake and the lower Truckee River.

At the conclusion of retiring 6,500 acres of water rights, model results indicate that 843 more acres of water rights would be permanently retired compared to the No Action alternative. Water associated with these water rights would never be diverted from the Truckee River thus benefiting Pyramid Lake and the trust assets of the Pyramid Lake Paiute Tribe.

3.10 Other Resource Areas

For the other resource areas listed below, there are no new circumstances or information that would warrant revising the analysis completed under the EA for the A.B. 380 Program:

- Fish
- Cultural Resources
- Environmental Justice

3.11 Cumulative Effects

Council on Environmental Quality (CEQ) regulations implementing NEPA define cumulative impacts as "...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR Section 1508.7).

The following other actions are addressed for cumulative effects.

<u>Truckee River Operating Agreement</u>
Status: The Final Environmental Impact Statement/Environmental Impact Report for the Truckee River Operating Agreement (TROA) was released in January 2008. The TROA document was signed in September 2008, and the final rule was published in the Federal Register (Part 429) in December 2008. The final Agreement has not yet been implemented, as it requires final court action to amend the Orr Ditch Decree.

The TROA was developed to provide a more flexible, basin-wide approach to operating reservoirs and managing water releases in the Truckee River watershed. TROA would provide opportunities to store water in existing reservoirs for future manufacturing and industrial demands during period of drought conditions in the Truckee Meadows, and to enhance spawning flows in the lower Truckee River for the benefit of Pyramid Lake fishes. It would also provide for the storage and

release of water from Truckee River reservoirs to satisfy the exercise of Orr Ditch and other decree water rights.

Potential Effects: Implementing either alternative considered in the EA for the Retirement Program is expected to result in potential effects of relatively small magnitude. The effects of either alternative added to TROA would not cause significant adverse cumulative effects to any of the resources considered in the EA for the A.B. 380 Program.

Truckee River Water Quality Settlement Agreement (WQSA)

Status: The WQSA established a joint program to improve Truckee River water quality and aquatic resource problems through the purchase and dedication of water rights to be used for increasing flows in the river from the Reno/Sparks area to Pyramid Lake. In 2002, the Bureau of Indian Affairs (BIA) prepared an Environmental Impact Statement (EIS) addressing the WQSA and the federal water rights acquisition program. The federal action was to spend $12 million acquiring water rights to match equal funding contributed by Reno, Sparks and Washoe County. The EIS for the WQSA Federal Program estimated that 8,500 acre-feet of water rights would be acquired with federal funds. Water rights were to be acquired from willing sellers in the Truckee Meadows (Reno/Sparks metropolitan area), the Truckee River corridor downstream to Derby Dam, and the Truckee Division of the Newlands Project. Water obtained from this acquisition program would be stored in Truckee River reservoirs managed by the Cities of Reno and Sparks, Washoe County and the Department of the Interior and released during periods of low flows in the river (BIA 2002).

The current status of the WQSA is the federal contribution of $12 million has been expended to purchase over 2,000 acre feet of water. The local jurisdictions are nearing conclusion of their portion of the agreement and have acquired over 3,000 acre feet of water. To date, an estimated 90 percent of the water rights acquisitions have occurred from the Vista area downstream, and more than 70 percent were purchased from the Truckee Division of the Newlands Project. (Great Basin Land and Water, pers. comm. 2010.)

Potential Effects: Implementation of the WQSA has produced fewer water rights purchases than estimated at the start of the program, resulting in fewer acres of water rights obtained from agricultural lands within the Truckee Division than described in the EIS for the program. Truckee River inflow to Pyramid Lake was expected to increase under the WQSA, especially during the mid-summer timeframe. Pyramid Lake levels would benefit from the additional water. While the acquisition of Truckee Division water rights would somewhat reduce the volume of water diverted into the Truckee Canal, a sufficient quantity of water would continue to be diverted from the Truckee River to serve water rights on the Newlands Project (BIA 2002).

Implementing either alternative considered in the EA for the Retirement Program is expected to result in potential effects of relatively small magnitude. The effects of either alternative added to WQSA would not cause significant adverse cumulative effects to any of the resources considered in the EA for the A.B. 380 Program.

Conversion of Agricultural Land to Urban Land

Status: The analysis area has experienced substantial increases in urban growth in recent years. The annual growth rates for Churchill and Lyon counties, including the Fallon and Fernley areas, increased between 2000 and 2009, climbing 10.8 percent for Churchill County and 35.9 percent for Lyon County (Nevada State Demographer's Office 2009).

Potential Effects: As urban growth expands in the Fallon and Fernley areas, conversion of agriculture lands to urban uses is likely to continue. The Carson Water Subconservancy District noted at the conclusion of the A.B. 380 Program that many of the acquired water rights were not used because there was no longer any actual means of conveyance for irrigation water due to the conversion of agricultural land to urban uses.

The 2000 EA for the A.B. 380 Program adequately describes the cumulative effects of urban growth and the changing land uses on the resources within the analysis area. Due to the relatively small magnitude of effects anticipated from the alternatives analyzed in this EA, it is expected that the effects of either alternative in concert with other potential actions would not cause significant adverse cumulative effects to any resources in the analysis area.

Recoupment Lawsuit

Status: Under a 2005 U.S. District Court judgment, the Truckee Carson Irrigation District (TCID) must repay, with water, previous illegal diversions that decreased inflows into Pyramid Lake. TCID completed a portion of the repayment, but challenged the District Court decision. On April 20, 2010, the Ninth Circuit Court upheld most of the ruling by the District Court. The Ninth Circuit's decision remanded many decisions on the total repayment volume back to the District Court, where the final outcome of those remands awaits resolution.

Potential Effects: Resolution of the recoupment lawsuit in favor of the United States has the potential to decrease diversions into the Truckee Canal and increase flows in the lower Truckee River and inflows to Pyramid Lake. The potential effects of recoupment cannot be accurately quantified until the U.S. District Court takes action on the recent ruling from the Ninth Circuit Court.

Section 4
Coordination and Consultation

4.1 Consultation and Coordination

This EA was prepared in consultation with the Pyramid Lake Paiute Tribe and the State of Nevada – Department of Conservation and Natural Resources.

Pursuant to Section 7 of the Endangered Species Act of 1973, Reclamation conducted informal consultation with the U.S. Fish & Wildlife Service (FWS) in 2000 for Reclamation's participation in the A.B. 380 Program to acquire and retire surface water rights in the Newlands Project area. An August 25, 2000 letter from FWS concurred with Reclamation's finding that the proposed action is not likely to adversely affect any federally listed species. Reclamation has determined that differences between the A.B. 380 Program and the Retirement Program are administrative in nature and would not affect listed species in a manner or extent not previously analyzed. No new species have been listed for the project area, and no critical habitat has been designated that could be affected by the proposed program.

4.2 Other Federal Laws, Regulations, and Executive Orders

In undertaking the proposal, Reclamation will comply with the following federal laws, executive orders, and legislative acts: Floodplain Management (Executive Order 11988); Protection of Wetlands (Executive Order 11990); Migratory Bird Treaty Act (16 U.S.C. 703 et seq.); Federal Noxious Weed Control Act, E.O. 13112, and 43 CFR 46.215 (l).

4.3 Public Involvement

This EA is being issued for a 15-day public review period. Responses to public comments will be included in the final EA.

4.4 Tribal Consultation

The Pyramid Lake Paiute Tribe and the Fallon Paiute-Shoshone Tribe will be consulted pursuant to federal legislation and executive orders concerning Native American government to government consultation, including NEPA and Indian Trust Assets.

Section 5
References

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